

## ABSTRACT OF THE DISCLOSURE

Modem relay provides a local interface to the modem on both ends of a call, demodulates the full duplex data stream, packetizes the bits for transport over an IP network, and remodulates the data stream at the remote end. The modem data stream can also be transported in a redundant fashion, which allows for seamless error recovery in the event of single or double packet loss events. Repetition of packets reduces effective bandwidth and can allow data loss in the event of loss of sequential packets. The present invention teaches the provision of redundant data without repetition of packets. The repetition of data within sequential packets allows for the recovery of data even in the event of multiple sequential packet loss. Since the data stream can be completely recovered after packet loss, the remote modem is able to recreate the local modem's transmission exactly. Lost packet recovery minimizes computational requirements and provides for recovery of lost packets during burst loss of a series of sequential packets.